

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-78. Canceled

79. (Currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence which encodes or is complementary to a sequence which encodes an ecdysteroid receptor (EcR) polypeptide that binds ecdysone, wherein the encoded EcR polypeptide ~~consists essentially of~~ has a sequence at least 95% identical to the amino acid sequence set forth in SEQ ID NO:10.

80. (Currently amended) The isolated nucleic acid molecule of claim 79, wherein said sequence ~~consists essentially of~~ is at least 95% identical to the nucleotide sequence set forth in SEQ ID NO:9.

81. (Currently amended) The isolated nucleic acid molecule of claim 79, wherein the isolated nucleic acid molecule further encodes an EcR partner protein (USP polypeptide) of a *Myzus persicae* EcR heterodimer, which USP polypeptide ~~consists essentially of~~ has a sequence at least 95% identical to an amino acid sequence as set forth in SEQ ID NO:12.

82-84. Canceled.

85. (Currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence which encodes or is complementary to a sequence which encodes an ecdysteroid receptor (EcR) polypeptide that binds ecdysone, when said EcR polypeptide is in association with a USP polypeptide, said EcR polypeptide ~~consisting of an amino acid sequence substantially identical~~ having a sequence

at least 95% identical to the amino acid sequence set forth in SEQ ID NO:10, wherein said encoded EcR polypeptide is not a *Drosophila melanogaster* EcR polypeptide.

86-87. (Canceled)

88. (Previously presented) The isolated nucleic acid molecule of claim 85, wherein the EcR polypeptide is derived from a member of the genus *Myzus*.
89. (Previously presented) The isolated nucleic acid molecule of claim 85, wherein the insect is *Myzus persicae*.
90. (Currently amended) The isolated nucleic acid molecule of claim 85, wherein the isolated nucleic acid molecule further encodes an EcR partner protein (USP polypeptide) of the *M. persicae* EcR polypeptide, wherein the USP polypeptide ~~consists essentially of~~ has a sequence at least 95% identical to an amino acid sequence set forth in SEQ ID NO:12.
91. (Previously presented) A genetic construct comprising the isolated nucleic acid molecule of claim 79, wherein said nucleotide sequence is operably linked to a promoter sequence.
92. (Previously presented) The genetic construct of claim 91, wherein said promoter sequence is a MMTV, SV40, polyhedrin or p10 promoter sequence.
93. (Previously presented) A cell comprising the genetic construct of claim 91.
94. (Previously presented) The cell of claim 93, wherein the cell further comprises a nucleic acid molecule encoding an ecdysteroid receptor partner protein (USP polypeptide) which is expressed in said cell.

95. (Currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence which encodes a ecdysteroid receptor (EcR) polypeptide, wherein said ecdysteroid receptor polypeptide is not from *Drosophila melanogaster*, wherein said EcR polypeptide binds ecdisone, and wherein said nucleotide sequence is substantially at least 95% identical to the nucleotide sequence set forth in SEQ ID NO:9 or a sequence complementary to said sequence.
96. (New) An isolated nucleic acid molecule comprising a nucleotide sequence which encodes or is complementary to a sequence which encodes an ecdysteroid receptor (EcR) polypeptide that binds ecdisone, wherein the encoded EcR polypeptide has a sequence at least 95% identical to the amino acid sequence set forth in SEQ ID NO:10, wherein the isolated nucleic acid molecule further encodes an EcR partner protein (USP polypeptide) of a *Myzus persicae* EcR heterodimer, which USP polypeptide is encoded by the nucleic acid sequence set forth in SEQ ID NO:11.
97. (New) An isolated nucleic acid molecule comprising a nucleotide sequence which encodes or is complementary to a sequence which encodes an ecdysteroid receptor (EcR) polypeptide that binds ecdisone, wherein the encoded EcR polypeptide has a sequence at least 95% identical to the amino acid sequence set forth in SEQ ID NO:10, wherein the isolated nucleic acid molecule further encodes an EcR partner protein (USP polypeptide) of a *Myzus persicae* EcR heterodimer, wherein the USP polypeptide is identical to that encoded by cDNA present in plasmid pMpUSP (AGAL Accession No. NM99/04568).
98. (New) An isolated nucleic acid molecule comprising a nucleotide sequence which encodes or is complementary to a sequence which encodes an ecdysteroid receptor (EcR) polypeptide that binds ecdisone, wherein the encoded EcR polypeptide has a sequence at least 95% identical to the amino acid sequence set forth in SEQ ID NO:10, wherein the isolated nucleic acid molecule further encodes an EcR partner

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protein (USP polypeptide) of a *Myzus persicae* EcR heterodimer, wherein said polypeptide consists of an amino acid sequence encoded by a cDNA present in the plasmid deposited under AGAL Accession No. NM99/04567.